



### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Jesse PEDIGO, et al.

Group No.:

1732

Application No.:

10/040,118

Examiner:

Not Yet Assigned

Filed:

January 3, 2002

For:

Hole Filling Using an Etched Hole-Fill Stand-Off

Box DD **Assistant Commissioner for Patents** Washington, D.C. 20231

RECEIVED
TO 1700 TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT WITHIN THREE MONTHS OF FILING OR **BEFORE MAILING OF FIRST OFFICE ACTION (37 C.F.R. 1.97(b))** 

#### IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING INFORMATION DISCLOSURE STATEMENT

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 C.F.R. 1.97(b).

By:

Respectfully submitted,

Date: April 4, 2002

David J. Zoetewer

Reg. No. 45,258

Attorneys for Applicant Rutan & Tucker, LLP 611 Anton Blvd., 14<sup>th</sup> Floor Costa Mesa, CA 92835

Tel: (714) 641-5100 Fax: (714) 546-9035

CERTIFICATE OF MAILING (37 C.F.R. 1.8(a))

I hereby certify that, on the date shown below, this correspondence is being deposited with the United States Postal Service with sufficient postage as Phys Class Mail, in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C.

Date: April 4, 2002

Honeywell's Docket No. H0003369 DIV (4960) Practitioner's Docket No. 100665.0053US2

# IN THE UNITED STATE PATENT AND TRADEMARK OFFICE WASHINGTON, D.C. 20231

In re application of: Jesse PEDIGO, et al.

Group: 1732

Serial No: 10/040,118

**Examiner: Not Yet Assigned** 

Filed:

**January 3, 2002** 

For:

Hole Filling Using an Etched Hole-

Fill Stand-Off

# INFORMATION DISCLOSURE STATEMENT

Box DD Assistant Commissioner of Patents Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the United States Patent and Trademark Office of all references coming to the attention of the Applicant(s) or attorneys or agents for Applicant(s) which are or may be material to the examination of the subject application, attorneys for the Applicant(s) hereby invite the Examiner's attention to the references listed in the accompanying PTO Form 1449 entitled "List of References Cited".

This submission is understood to complement the results of the Examiner's own independent search. The submission of this Disclosure Statement should not be construed as a representation that a search was made, or that the cited items are inclusive of all relevant and material citations that may be available publicly.

#### Honeywell's Docket No. H0003369 DIV (4960) Practitioner's Docket No. 100665.0053US2

Applicant(s) respectfully request that the Examiner review the foregoing references, as set forth in the Form PTO-1449, and that they be made of record in the file history of the above-captioned application.

Respectfully submitted,

Rutan & Tucker, LLP

Dated: April 4, 2002

David J. Zoetewey

Reg. No. 45,258

Attorneys for Applicant(s) 611 Anton Blvd., 14<sup>th</sup> Floor Costa Mesa, CA 92626

Tel: 714-641-5100 Fax: 714-546-9035 LIST OF REFERENCES CITED BY APPLICATION

(Use several sheets if necessary)

ATTY. DOCKET NO. SERIAL NO. 10/0465.0053US2 10/040,118

APPLICANT

Jesse Pedigo, et al.

RECEIVED

FILING DATE

01/03/02 APR 1 01<del>20</del>02

TC 1700

# U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	3,601,523	08/24/71	Through Hole Connectors	174	68.5	06/19/70
	4,106,187	08/15/78	Curved Rigid Printed Circuit Boards	29	625	01/16/76
	4,283,243	08/11/81	Use of Photosensitive Stratum to Create Through-Hole Connections in Circuit Boards	156	237	03/20/80
	4,360,570	11/23/82	Use of Photosensitive Stratum to Create Through-Hole Connections in Circuit Boards	428	596	06/15/81
	4,622,239	11/11/86	Method and Apparatus for Dispensing Viscous  Materials	427	96	02/18/86
	4,700,474	10/20/87	Apparatus and Method for Temporarily Sealing Holes in Printed Circuit Boards	29	846	11/26/86
	4,777,721	10/18/88	Apparatus and Method for Temporarily Sealing Holes in Printed Circuit Boards Utilizing a Thermodeformable Material	29	846	10/15/87
	4,783,247	11/8/88	Method and Manufacture for Electrically Insulating Base Material Used in Plated-Through Printed Circuit Panels	204	181.1	05/15/86
	4,884,337	12/05/89	Method for Temporarily Sealing Holes in Printed Circuit Boards Utilizing a Thermodeformable Material	29	846	10/15/87
	4,964,948	10/23/90	Printed Circuit Board Through Hole Technique	156	659	11/13/89
	4,995,941	02/26/91	Method of Manufacture Interconnect Device	156	630	05/15/89
	5,053,921	10/01/91	Multilayer Interconnect Device and Method of Manufacture Thereof	361	386	10/23/90
	5,058,265	10/22/91	Method for Packaging a Board of Electronic Components	29	852	09/10/90
	5,145,691	09/08/92	Apparatus for Packing Filler into Through-Holes or the Like in a Printed Circuit Board	425	110	03/22/91
	5,220,723	06/22/93	Process for Preparing Multi-Layer Printed Wiring Board	29	830	11/04/91
	5,451,,721	09/19/95	Multilayer Printed Circuit Board and Method for Fabricating Same	174	261	09/24/91
	5,540,779	07/30/96	Apparatus for Manufacture of Multi-Layer Ceramic Interconnect Structures	118	692	03/01/95
	5,766,670	06/16/98	Via Fill Compositions for Direct Attach of Devices and Methods for Applying Same	427	8	11/17/93
	5,578,151	11/26/96	Manufacture of A Multi-Layer Interconnect Structure	156	64	03/01/95

EXAMINER			DATE CONSIDERED			
	· ·					
Τ	1					·
OTHER REFERE	NCES (Including Author, Title	, Date, Pertinent	Pages, Etc.)			<u> </u>
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES
FOREIGN PATEN	T DOCUMENTS			<del></del>	T	<b></b>
	5,824,155	10/20/98	Method and Apparatus for Dispensing Viscous Material	118	410	11/08/95
	5,822,856	10/20/98	Manufacturing Circuit Boards Assemblies Having Filled Vias	29	832	06/28/96
	5,761,803	06/09/98	Method of Forming Plugs in Vias of A Circuit Board by Utilizing a Porous Membrane	29	852	06/26/96
	5,753,976	05/19/98	Multi-Layer Circuit Having a Via Matrix Interlayer Connection	257	774	06/14/96
	5,744,285	04/28/98	Composition and Process for Filling Vias	430	318	07/18/96
	5,744,171	04/28/98	System for Fabricating Conductive Epoxy Grid Array Semiconductor Packages	425	110	05/12/97
	5,699,613	12/23/97	Fine Dimension Stacked Vias for a Multiple Layer Circuit Board Structure	29	852	09/25/95
MAUS	5,662,987	09/02/97	Multilayer Printed Wiring Board and Method of Making Same	428	209	<b>600</b> %
S TO STANKE OF	5,637,834	06/10/97	Multilayer Circuit Substrate and Method for Forming Same	174	264	<b>2002</b> 5
R 0 8 2002 8	5,591,353	01/07/97	Reduction of Surface Copper Thickness on Surface  Mount Printed Wire Boards with Copper Plated  Through Holes by the Chemical Planarization Method	216	REC.	EIVI

<del></del>				ATTY, DOCKET NO.		ERIAL NO.		
•				100665.0053US2		10/040,118		
LIST OF RE	FERENCES CITED BY A	PPLICATE		APPLICANT	CEN	-		
(Use several shee	ets if necessary)	/ 5 2	4	Jesse Pedigo, et al.	<u> </u>	En		
		APR 0 8 20	OR S	Jesse Pedigo, et al.  FILING DATE  12/20/01	8 2002	732		
U.S. PATENT I	OOCUMENTS	FAIT & TRADEM			10C	)		_
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING I	DATE PRIATE
	5,851,344	12/22/98		ssisted Contact Hole Filling	156	379.6	12/22/9	)8 
	5,906,042	05/25/99	L .	ure to Interconnect Traces of Two in a Printed Circuit Board	29	852	10/04/9	)5
	5,925,414	07/20/99	Nozzle and Methodinto High Aspect F	d for Extruding Conductive Paste tatio Openings	427	282	07/20/9	<del>)</del> 9
	5,994,779	11/30/99	Semiconductor Fal Metallization Tech	prication Employing a Spacer nique	257	773	05/02/9	97
	6,000,129	12/14/99	Process for Manuf	acturing a Circuit with Filled Holes	29	852	03/12/9	98
	6,009,620	01/04/00	Method of Making Filled Holes	a Printed Circuit Board Having	29	852	07/15/9	98
	6,079,100	06/27/00	1	a Printed Circuit Board Having ill Member for Use Therewith	29	852	05/12/9	98
	6,090,474	07/18/00	Flowable Compos Plated Through-H	itions and Use in Filling Vias and oles	428	209	07/18/	00
	6,106,891	08/22/00	Via Fill Compositi	ions for Direct Attach of Devices and ing Same	427	97	12/18/	98
	6,138,350	10/31/00	Process for Manuf Holes	facturing a Circuit Board with Filled	29	852	02/25/	98
	6,153,508	11/28/00		it Having a Via Matrix Interlayer  Iethod for Fabricating the Same	438	622	02/19/	98
	6,276,055	08/21/01		ratus for Forming Plugs in Vias of a	29	852	09/24/	′98
	6,281,448	08/28/01	<u> </u>	pard and Electronic Components	174	260	08/10/99	
	6,282,782	09/04/01	Forming Plugs in Subassemblies	Vias of Circuit Board Layers and	29	852		
FOREIGN PA	TENT DOCUMENTS						1	
	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRANSLA	NO
					<del> </del>	<del> </del>	1123	
	EP 0 194 247 A2							
	EP 0 713 358 A2							
	EP 0 723 388 A1							
	GB 2 120 017 A						ļ	
	GB 2 341 347 A							

1.19	GB 2 246 912 A			
E vo	JP 04239193			
7002				
NO BANDE SE	JP 05275819			
WY & TRADENT	JP 53-10487	RECE	IVED	
	JP 54-139065	APR 0 9	002	
	JP 62-277794	RECE APR 0 9 2 TC 17	QO	
	JP 62-287696		yu	
	JP 03004595			
	JP 04186792			
	JP 07176871			
	JP 08172265			
	JP 08191184			
	JP 09321399		-	
	JP 09083135			
	JP 10065339			
	JP 10256687			
	JP 11054909			
	JP 1173696			
	JP 1236694			
	JP 58011172			
	FR 2 684 836			
	FR 2 714 567			1
	WO 86/06243			
OTHER REFER	ENCES (Including Author, Title, Date, Pertinent Pages, Etc.	)		<u></u>
	Via Etching Process, February 1972			
	Multilayer Printed Circuit Board Connections, April 199	06		
	Process for Forming Copper Clad Vias, August 1989			
EXAMINER		DATE CONSIDERED		<del></del>